ROADSTAR

INSTRUCTION MANUAL

CAR CASSETTE PLAYER WITH AM/FM RADIO

MODEL: RS-3020

SPECIFICATIONS

Type	: AM/FM Car Radio with Cassette Player

★ FM RADIO

Frequency Range	: 88-108 MHz
Intermediate Frequency	: 10.7 MHz
Usable Sensitivity	: 16dB

★ AM RADIO

Frequency Range	: 535-1605 kHz
Intermediate Frequency	: 455 kHz
Usable Sensitivity	: 35 dB

★ TAPE PLAYER

Tape play Type	Cassette Car Player
Tape Speed	: 1-7/8 in per sec(4.75 cm/sec)
Wow and Flutter	: Less than 0.35%(WRMS)
Cross Talk	: 40 dB
Signal to Noise Ratio	: 40 dB
Power Source	: DC 13.8 volt(11-16V) Negative Ground System
Output Impedance	: 4-8 ohms
Semiconductors	: 2 ICs, 8 transistors and 3 diodes
Dimensions	: 165(W) x 44(H) x 116(D) mm
Output Power	: 6W

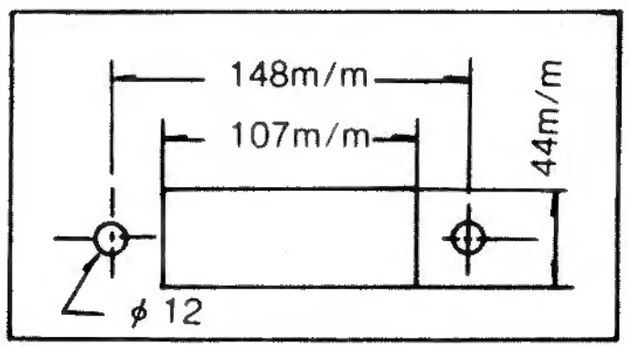
Specifications subject to change for improvement without notice

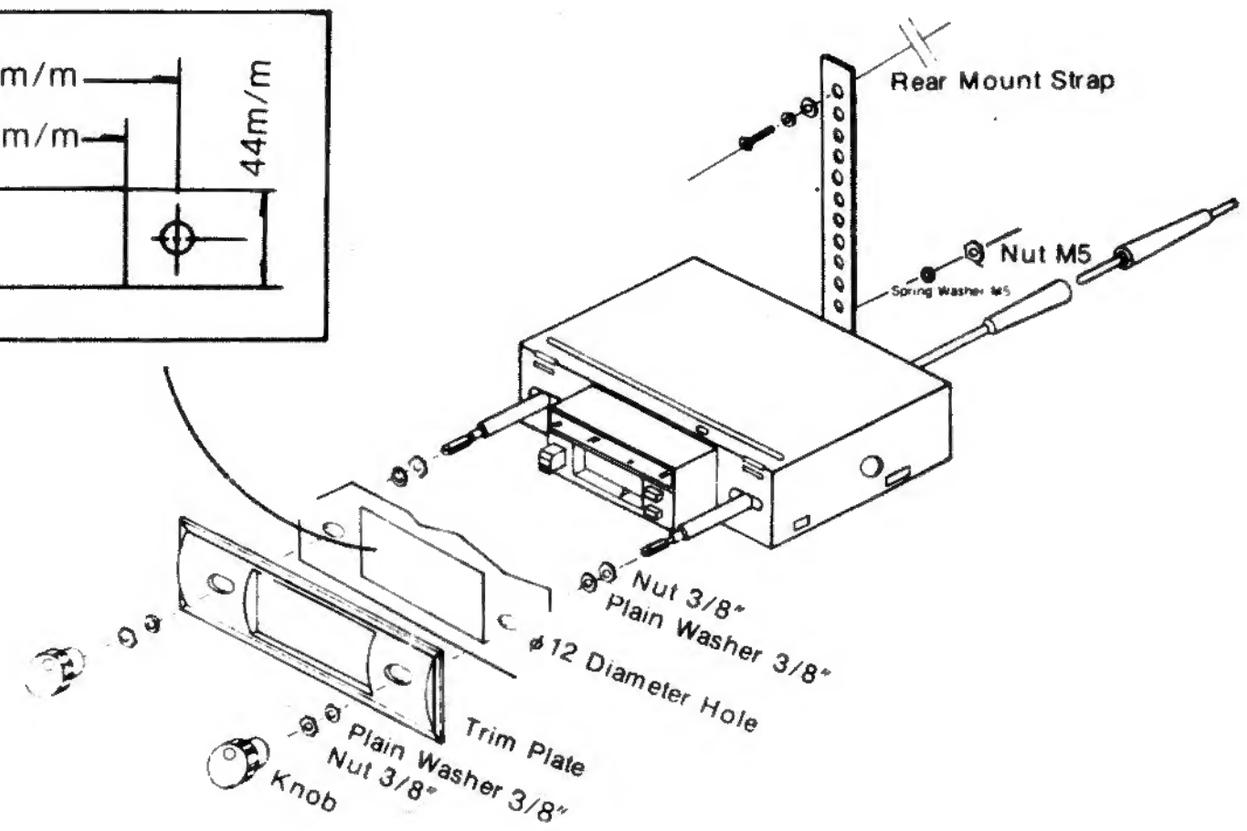
INTRODUCTION

Congratulations on your purchase of the AM/FM car radio with cassette player. It features fast forward for rapid tape advancoment and compact size for installation in most domestic or import cars.

IN-DASH INSTALLATION

The unit is designed to fit in most domestic or import cars without dashboard adjustment Insert the unit into the dash opening, and adjust the volum/tuning shafts if needed by loosening the hex nuts and positioning the shafts.
Once the unit is in-dash, bolt the mounting strap to the rear of the unit, and attach the other end to an existing bolt on the vehicle firewall. If drilling to install a bolt in required, be sure there is enough clearance from obstructions behind the area to be cut.



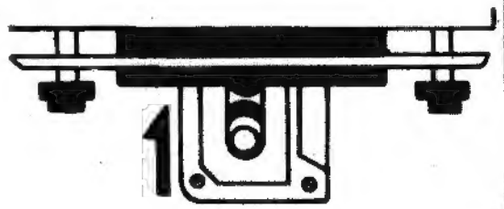


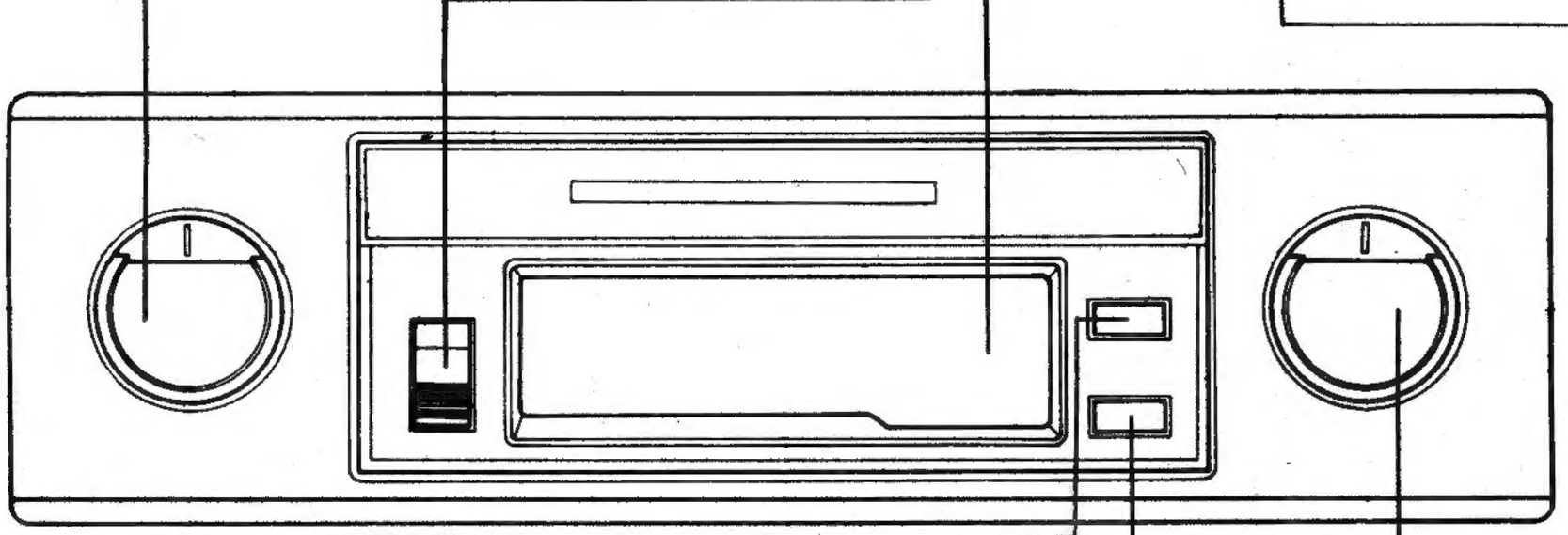
UNIT CONTROLS AND OPERATION

ON-OFF VOLUME Control
Rotate clockwise to turn the unit on, and continue rotation to increase the volume level. To turn the unit off, rotate the knob counterclockwise until audible "click" is heard.

FAST FORWARD EJECT Control
Push button in halfway to rapidly advance the tape. To stop fast forward, depress button lightly. To eject a tape, push the button in fully.

CASSETTE DOOR
Pushing the cassette at the center, with the side where the tape is visible toward the right insert it into the cassette door till it is securely locked.
NOTE: Insertion of the cassette with the radio on will result in an automatic changeover to tape playing.





AM/FM Selector
Push button in to receive FM, or depress out to receive AM broadcasts.

TONE LOW/HI SELECTOR

Tuning Control
Rotate clockwise or counter clockwise to select desired AM or FM stations.

CASSETTE OPERATION AND HANDLING

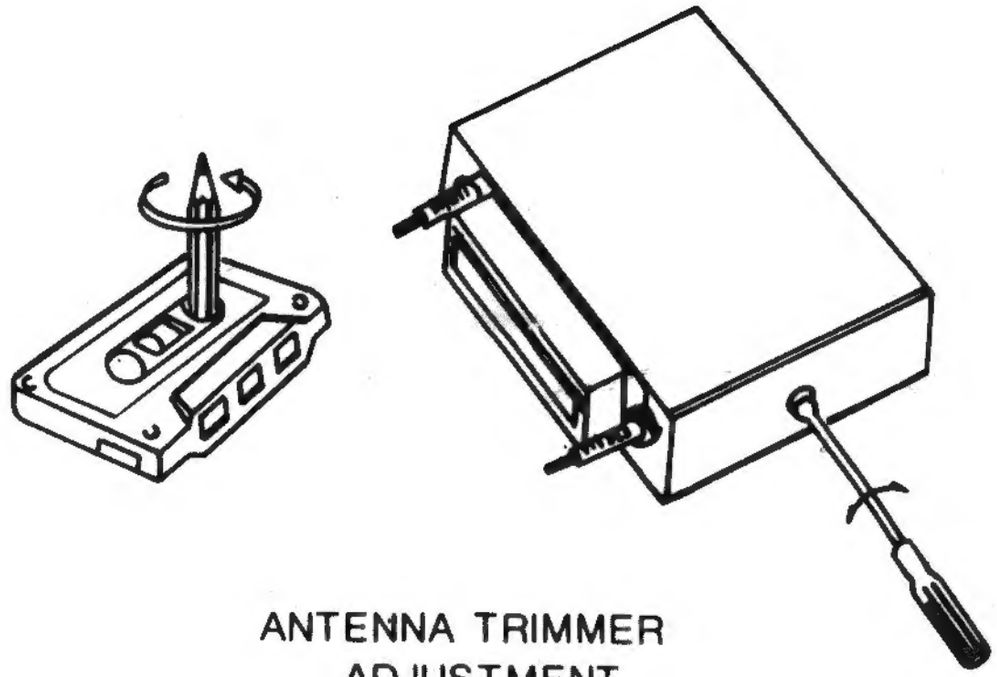
Turn the unit ON and insert the tape cassette into the loading slot as illustrated above. For fast forward of the tape, push "FF/EJECT" button to continue searching for a position of your choice. To remove the cassette, depress the "FF/EJECT" button completely. Before inserting the cassette into the unit, reduce excess tape slack by rotating the reel hub to take up the slack. Store the cassette out of direct sunlight and high heat temperature.

ANTENNA TRIMMER ADJUSTMENT

The antenna trimmer is factory preset, but certain installations may require readjustment. To adjust, tune the AM band to a weak station near 1400 KHz. Insert a small blade screwdriver into the antenna trimmer screw and rotate the screwdriver left or right for maximum volume.

MAINTENANCE

Oxide buildup on the tape head may cause loss of volume and high frequency reproduction. Clean the tape head with a cotton applicator moistened with alcohol, or use a head cleaning casstte available at most dealers.



ANTENNA TRIMMER ADJUSTMENT

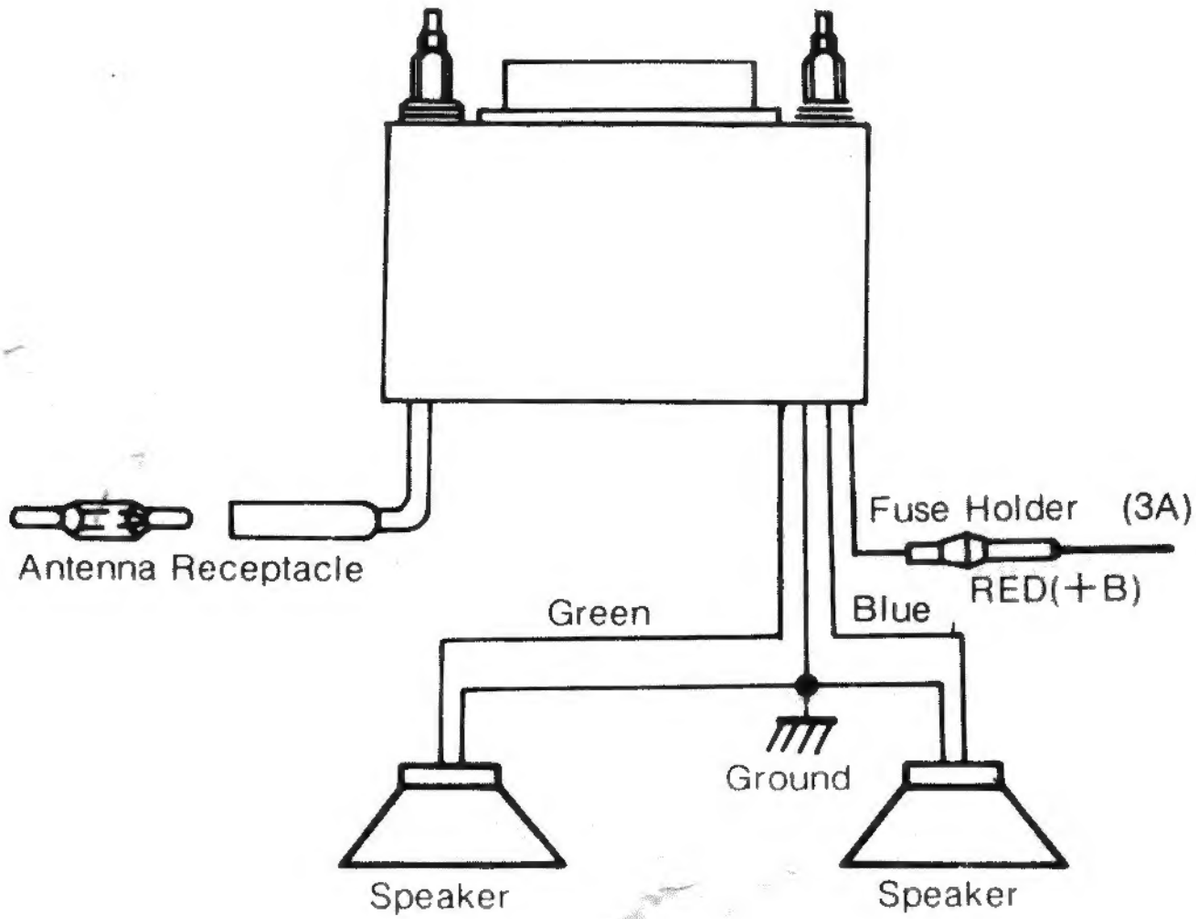
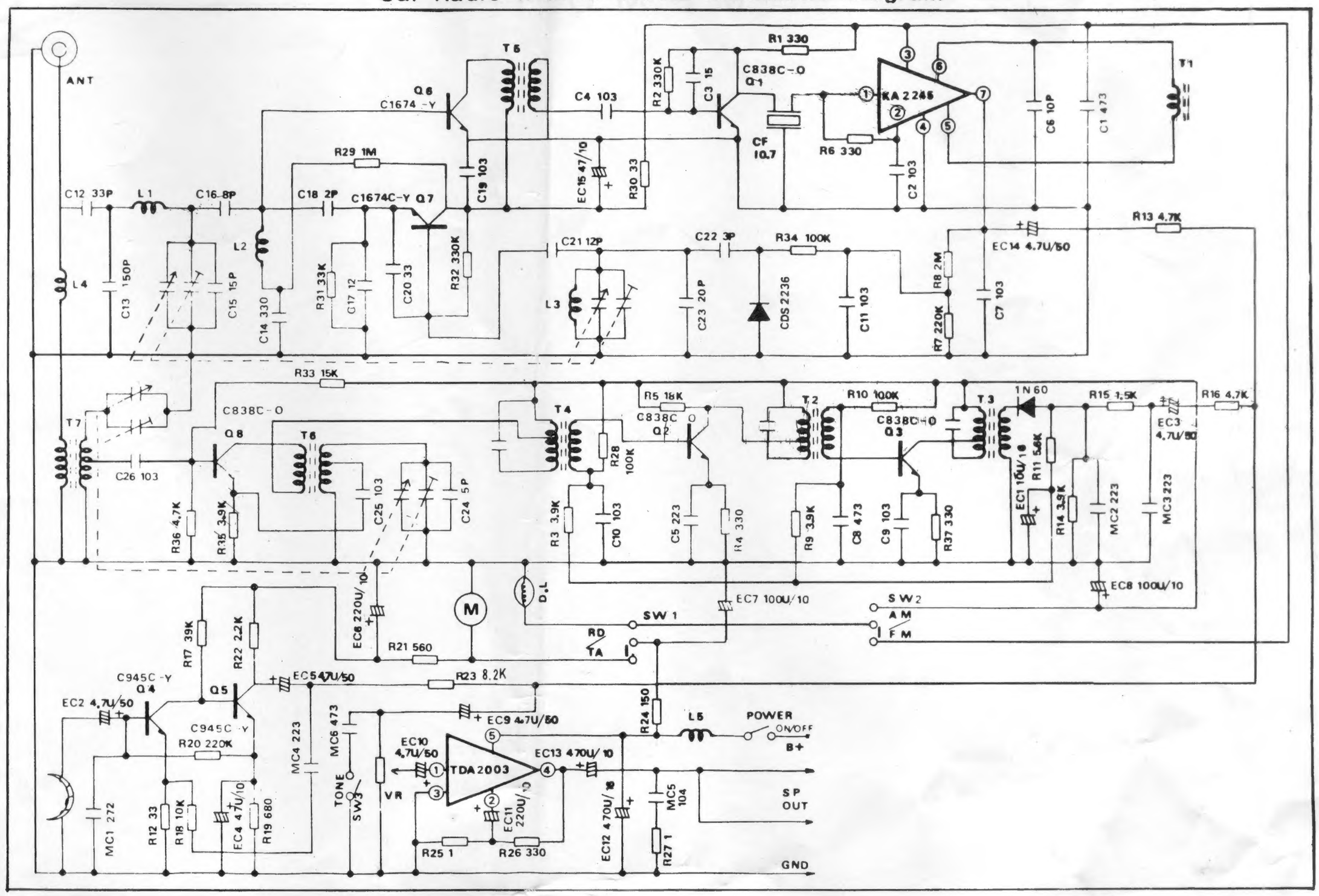
ELECTRICAL WIRING

(Negative Ground Car Systems)

Connect the positive lead to a positive accessory terminal on the fuse block. The unit will operate only with the ignition on if required, connect a ground wire from the unit to a metal portion of the vehicle chassis.

SPEAKER WIRING

Green wire to the positive terminals on the speakers.
Blue wire to the positive terminals on the speakers.
Connect the Ground wire to the negative terminals of the speakers to the vehicle chassis.



Car Radio with Cassette Schematic Diagram